

1. A method for listening to simultaneous radio transmissions, the method comprising:

- receiving a first radio transmission at a first carrier frequency;
- demodulating the first radio transmission to produce a first audio signal;
- adding a first differentiation cue to the first audio signal to produce a right first audio signal and a left first audio signal;
- receiving a second radio transmission at a second carrier frequency;
- demodulating the second radio transmission to produce a second audio signal;
- adding a second differentiation cue to the second audio signal to produce a right second audio signal and a left second audio signal;
- providing the right first audio signal and right second audio signal to a right audio transducer; and
- providing the left first audio signal and the left second audio signal to a left audio transducer.

3. The method of claim 2 wherein the continuous broadcast is a weather report broadcast.

5. The method of claim 4 wherein the channel separation is an amplitude difference between the right first audio signal and the left first audio signal.

7. A communication system comprising:

2 a first audio input configured to receive a first monaural audio signal;  
3 a second audio input configured to receive a second monaural audio  
4 signal;  
5 a first differentiation block coupled to the first audio input and providing a  
6 fixed first differentiation cue to the first audio input to create a first right channel and a  
7 first left channel;  
8 a second differentiation block coupled to the second audio input and  
9 providing a second fixed differentiation cue to the second audio input to create a second  
10 right channel and a second left channel;  
11 a left channel summer combining the first left channel and the second left  
12 channel to produce a left channel output; and  
13 a right channel summer combining the first right channel and the second  
14 right channel to produce a right channel output.

1 8. The communication system of claim 7 wherein the second  
2 monaural audio signal is produced by a microphone coupled to the communication  
3 system.

1 9. The communication system of claim 7 wherein the first monaural  
2 audio signal is provided from a radio receiver.

1 10. The communication system of claim 9 further comprising a  
2 microphone coupled to the communication system and, the microphone producing a third  
3 audio signal coupled to a third differentiation block, the third differentiation block  
4 providing a third differentiation cue to the third audio signal to produce a third left  
5 channel and a third right channel, the third left channel being coupled to the left channel  
6 summer and the third right channel being coupled to the third right channel summer.

1 11. The communication system of claim 9 further comprising a  
2 detector coupled to the radio receiver, the detector coupled to a switch disposed between  
3 the second audio input and the left channel summer and the right channel summer, the  
4 switch being responsive to a detection signal produced by the detector and opening when  
5 a signal is detected.

1 12. The communication system of claim 7 wherein a resistive voltage  
2 divider provides the first fixed differentiation cue.

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14. A method for listening to simultaneous audio information, the method comprising:

- providing a first monaural audio signal;
- adding a differentiation cue to the first monaural audio signal to produce a left signal and a right signal;
- providing a second audio signal, the second audio signal being at least partially simultaneous with the first monaural audio signal;
- coupling the left signal, the right signal, and the second audio signal to a stereo transducer so that a listener perceiving an output of the stereo transducer more easily perceives information contained in the first monaural audio signal than if the differentiation cue were not added to the first monaural audio signal.

1            15.     A method for identifying a radio channel, the method comprising:  
2            receiving a radio broadcast;  
3            demodulating the radio broadcast to produce a monaural audio signal;  
4            adding a differentiation cue to the monaural audio signal to produce a left  
5            signal and a right signal;  
6            coupling the left signal and the right signal to a stereo transducer so that a  
7            listener perceiving an output of the stereo transducer perceives the audio signal as coming  
8            from a unique position in psycho-acoustic space and thereby identifies the radio channel  
9            according to its perceived position.

1                    16.    The method of claim 15 wherein the differentiation cue is  
2    determined according to a position of a transmitter, the position of the transmitter being  
3    determined by a locator.

1                    17.    The method of claim 16 further comprising a step of displaying a  
2 representation of the position of the transmitter on a display of the locator.

1                    18.    An apparatus for listening to a plurality of contemporaneous radio  
2    transmissions, the apparatus comprising:

3 a plurality of front microphone inputs, including a first microphone input  
 4 and a second microphone input for producing a front microphone signal;  
 5 a first differentiation block for adding a first differentiation cue to said  
 6 front microphone signal to provide a front right channel signal and a front left channel  
 7 signal;  
 8 a right summer for receiving said front right channel signal;  
 9 a left summer for receiving said front left channel signal;  
 10 at least one of a plurality of navigation and/or annunciator inputs for  
 11 providing an annunciator signal;  
 12 a third differentiation block for adding a third differentiation cue to said  
 13 annunciator signal to provide a differentiated signal to said right summer and said left  
 14 summer;  
 15 a fourth differentiation block for adding a fourth differentiation cue to a  
 16 first communication input signal (Com1) to provide a differentiated signal to said right  
 17 summer and said left summer;  
 18 a fifth differentiation block for adding a fifth differentiation cue to a  
 19 second communication input signal (Com2) to provide a differentiated signal to said right  
 20 summer and said left summer;  
 21 a left output channel for providing a summed output signal from said left  
 22 summer; and  
 23 a right output channel for providing a summed output signal from said  
 24 right summer,  
 25 wherein, said differentiation cues differ from one another to create an  
 26 impression that sounds associated with each of said differentiation cues originates from a  
 27 unique psycho-acoustic location.

1 19. The apparatus of claim 18 further comprising:  
 2 a summer for summing said first and said second microphone inputs to  
 3 produce said front microphone signal.

1 20. The apparatus of claim 18 further comprising:  
 2 a plurality of back microphone inputs, including a third microphone input  
 3 and a fourth microphone input, for producing a back microphone signal;

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4 a differentiation block for adding a second differentiation cue to said back  
5 microphone signal to provide a back right channel signal to said right summer and a back  
6 left channel signal to said left summer.

1 21. The apparatus of claim 20 further comprising:  
2 a summer for summing said third and said fourth microphone inputs to  
3 produce said back microphone signal.

1 22. The apparatus of claim 18 further comprising:  
2 an input for an automatically mutable stereo entertainment system for  
3 providing a first input to said left summer and a second input to said right summer.

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